**\*\*Goal:\*\***Use Raspberry Pi to host and configure an IRC server.

**\*\*Steps:\*\***

1. \*Get Raspberry Pi and microSD card
2. \*Download Rasbarian OS onto SD card
3. \*Boot Rasberry Pi into Rasbarian

Run update and upgrade commands

(sudo apt-get update && sudo apt-get upgrade –y)

1. \*Run install command

(sudo apt-get install gcc libssl-dev –y)

1. \*Download IRC server called UnrealIRCd and install to /usr/bin
2. \*Configure the Unreal IRC by navigating to the Unreal folder (cd Unreal 13.2)

then (/Config) command

1. \*Change support SSL connections to “Yes”
2. \*Leave all other settings on default
3. \*Genertate SSL certificate and type (make)
4. \* CD /usr/bing and run unrealircd.conf
5. \* Many configurations were made in this file based on online research
6. \*Start IRC server using (/unreal start) command

**Risks/Challenges:**

1. \*Getting Rasbarian to boot
2. \*Finding an easy to configure IRC server that’s compatible with Rasbarian
3. \*Trial and error with different configuration settings until it worked (configuration is the hardest part)
4. \*Downloading Rasbarian(long download)
5. \*UnrealIRCd not issuing SSL certificate after changing configuration setting

**Materials Needed:**

1. \*Raspberry Pi
2. \*Internet Connection
3. \*MicroSD card
4. \*Sd card reader
5. \*Computer to download